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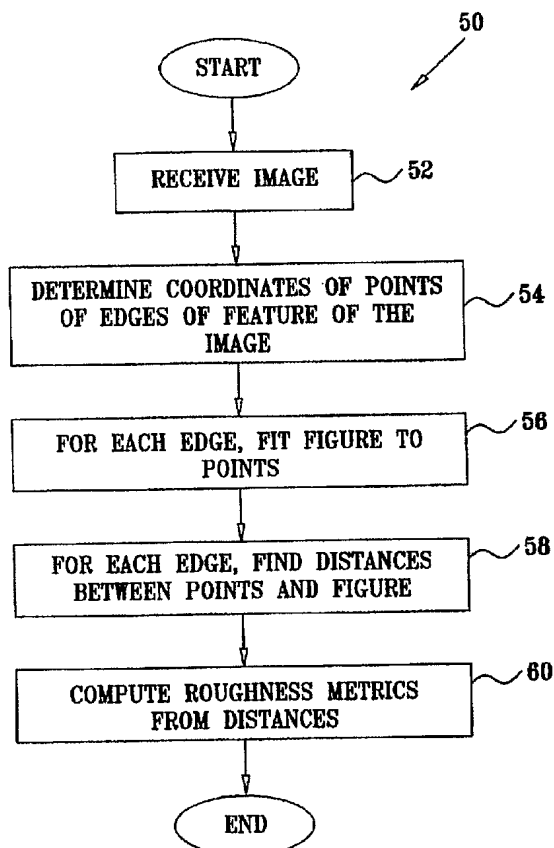
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(54) Title: **ADVANCED ROUGHNESS METROLOGY**



(57) **Abstract:** A method for evaluating a feature, consisting of receiving an image of the feature and determining respective coordinates of a plurality of points on an edge of the feature in the image. A figure having a non-circular non-linear shape is fitted to the plurality of points, and respective distances between the plurality of points and the figure are determined. A roughness parameter for the feature is computed in response to the respective distances. The method finds application in the analysis of critical dimensions (CD) of integrated circuits and, particularly, in the measurement of the edge roughness of their features and components as imaged by means of eg. The electron scanning microscopy (SEM).

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